difference between the fourth and fifth pixel data;

selecting a minimum value from the first, second and third values;

multiplying the minimum value by a coefficient,

setting a polarity of the minimum value multiplied by the coefficient by comparing the second pixel data with the fourth pixel data;

calculating a right side interpolation component by adding together a ½ value of the third pixel data and the minimum value applied with the polarity and multiplied by the coefficient;

calculating a left side interpolation component by subtracting the minimum value applied with the polarity and multiplied by the coefficient from the ½ value of the third pixel data; and

adding the right side interpolation component of a present pixel on the left side of an assumption pixel to be interpolated to the left side interpolation component of another present pixel on the right side of the assumption pixel, thereby obtaining a pixel data for the assumption pixel.

A copy of the marked up amended claims is attached to this response showing the changes as set forth in amended 37 C.F.R. § 1.121.

REMARKS

Claims 2 and 4 are pending in this application. By this Amendment, claims 1 and 3 are canceled. Dependent claims 2 and 4 are amended to incorporate the subject matter of canceled claims 1 and 3. No new matter is added. The above amendments and the following remarks are submitted as a full and complete response to the Office Action dated August 14, 2001.

Applicant gratefully appreciates the Office Action's indication that dependent claims 2 and 4 would be allowed if amended into independent form. Applicant has amended claims 2 and 4 accordingly. Thus, Applicant respectfully submits that pending claims 2 and 4 contain allowable subject matter.

The Office Action objects to the drawings, asserting informalities under MPEP §608.02(g). Figs. 1 and 3 are corrected pursuant to the attached Request for Approval of Drawing Corrections. Accordingly, Applicant respectfully requests the withdrawal of the objections to the drawings.

The Office Action rejects claim 1 under 35 U.S.C. §102(b) over Applicant's admitted prior art (APA) and rejects claim 3 under 35 U.S.C. §103(a) over APA and Kovacevic et al. (U.S. Patent No. 5,661,525). The rejection of claims 1 and 3 are moot in view of their cancellation.

In view of the above, Applicant respectfully submits that all of pending claims 2 and 4 contain allowable subject matter. Therefore, this application is in condition for allowance. Favorable consideration and prompt allowance is earnestly solicited.
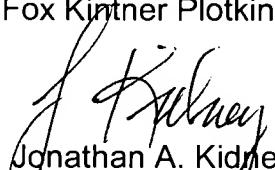
Should the Examiner believe that anything further is necessary to place in even better condition for allowance, the Examiner is invited to contact Applicant's undersigned attorney at the telephone number listed below.

In the event this paper is not considered to be timely filed, Applicant respectfully petitions for an appropriate extension of time. The Commissioner is authorized to charge

payment for any additional fees which may be required with respect to this paper to

Counsel's Deposit Account 01-2300.

Respectfully submitted,

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Enclosures: Marked-Up Copy of Amended Claims
Request for Approval of Drawing Corrections

MARKED-UP COPY OF AMENDED CLAIMS

2. (Once Amended) [The method according to claim 1 further comprising:] A method for interpolating a video signal having a plurality of present pixels comprising the steps of:

calculating an adjusting value based on a pixel data of a central present pixel and pixel data of present pixels around the central present pixel;

setting a polarity of adjusting value based on pixel data of a pair of present pixels on both sides of the central present pixel;

calculating [the] a right side interpolation component for the central present pixel based on a ½ value of the pixel data of the central present pixel and the adjusting value applied with [the] a polarity[, and];

calculating [the] a left side interpolation component for the central present pixel based on a ½ value of the pixel data of the central present pixel and the adjusting value applied with the polarity; and

adding the right side interpolation component of a present pixel on the left side of an assumption pixel to be interpolated to the left side interpolation component of another present pixel on the right side of the assumption pixel, thereby obtaining a pixel data for the assumption pixel.

4. (Once Amended) [The method according to claim 1 further comprising:] A method for interpolating a video signal having a plurality of present pixels comprising the steps of:

identifying pixel data of five sequential present pixels in a direction selected from a horizontal direction, vertical direction and oblique direction as a first pixel data, a

second pixel data, a third pixel data, a fourth pixel data and a fifth pixel data in order;

obtaining a first value obtained by adding together an absolute value of the difference between the first and second pixel data and an absolute value of the difference between the second and third pixel data;

obtaining a second value obtained by adding together an absolute value of the difference between the second and third pixel data and an absolute value of the difference between the third and fourth pixel data;

obtaining a third value obtained by adding together an absolute value of the difference between the third and fourth pixel data and an absolute value of the difference between the fourth and fifth pixel data;

selecting a minimum value from the first, second and third values;

multiplying the minimum value by a coefficient,

setting a polarity of the minimum value multiplied by the coefficient by comparing the second pixel data with the fourth pixel data;

calculating a right side interpolation component by adding together a ½ value of the third pixel data and the minimum value applied with the polarity and multiplied by the coefficient; [and]

calculating a left side interpolation component by subtracting the minimum value applied with the polarity and multiplied by the coefficient from the ½ value of the third pixel data; and

adding the right side interpolation component of a present pixel on the left side of an assumption pixel to be interpolated to the left side interpolation component of

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another present pixel on the right side of the assumption pixel, thereby obtaining a pixel

data for the assumption pixel.